

Contract EP-C-17-041 WA 1-52 Follow-up work for SWMM-EPANET-UI Graphical User Interface and the National Stormwater Calculator Mobile App

1.0 Objective:

This work is follow-on work to resolve the open issues SWMM-EPANET Graphical User Interface, BASINS/HSPF, and the national Stormwater Calculator. The contractor will present an itemized broken out cost estimate for the following actions. This work falls under Section 6.0 Implementation Support and 9.0 Information Management under the Performance Work Statement of Contract EPC17041.

2.0 Introduction:

Under Contract **EP-C-17-041 WA 0-52**, ERG/ReSPEC were contracted by the USEPA to update the Graphical User Interface for EPA Models SWMM <https://www.epa.gov/water-research/storm-water-management-model-swmm> and EPANET <https://www.epa.gov/water-research/epanet> . The final project deliverable from this project can be found on https://github.com/USEPA/SWMM-EPANET_User_Interface .

3.0 Tasks:

There are several open issues for both the SWMM and the EPANET Graphical User Interface, as listed the issues tab of this GitHub page. The contractor shall:

1. Provide assistance in closing the open issues for the SWMM-SWMM User Interface as noted on the GitHub page. In doing so, the contractor shall:
 - a. Once approved, the contractor shall modify or enhance the python code to resolve the open issues in the SWMM-EPANET User Interface repository in a manner consistent with established industry standards and practices. See USER INTERFACE APPLICATION SOFTWARE ARCHITECTURES from EPA Contract #GS-10F-0041X, RSI-QAPP-16, Revision 0 by AquaTerra Consultants, March 2016, as an example of established industry standards.. Enhancements and fixes should be high quality and defensible
 - b. Provide documentation (e.g., text in issue tickets) that describes how the enhancement/fix was implemented.
 - c. Regularly perform unit and other code testing, as per approved QAPP.
 - d. Address and close issues via the GitHub process.

2. Provide assistance in closing the open issues for the SWC Mobile Application as noted on the Breeze page. In doing so, the contractor shall:
 - a. Document all source code and programming updates to the SWC web app in GitHub, in the EPA SWC web app GitHub repository:
https://github.com/USEPA/National_Stormwater_Calculator_Web_App .
Communicate with EPA WACOR when the EPA GitHub repository has been updated.
 - b. Address existing and new Breeze Board maintenance issues that have been documented by EPA in the following link: <https://app.breeze.pm/projects/85763> .
Document the status and progress for debugging, testing, and resolving the Breeze Board maintenance tickets.
 - c. Document, assess, and develop solutions for maintenance issues that EPA receives from its user community on a monthly basis from September 26, 2018 to September 25, 2019.
 - d. Assist EPA with resolving any issues with the SWC mobile web app functioning properly on the EPA's hosting servers (Staging and Production); including supporting deployment of code updates to the National Computing Center (NCC). Document the process for successfully deploying code updates to the NCC servers. Develop unit testing procedures for the SWC web app, that will alert EPA of when main programming units of the web app are not functioning correctly. Provide recommendations to EPA on when to deploy code updates to the NCC servers. Provide EPA with recommendations for alternative web hosting options, including cloud hosting options which may be more cost effective (time and resources) and offer higher computing performance for EPA.

3.0 Workplan:

Before any work proceeds, the contractor shall provide a detailed work plan with itemized costs and time for completion estimates for items 1, a, b, c, d, and e items (i) through (iii) and items 2, a, b, c items (i) through (ii). This performance work statement assumes much many informal communication episodes between EPA and contractor.

4.0 Schedule of Deliverables:

Item	Deliverable	Due Date to EPA
1	Kick-off Meeting	Upon work assignment date
2	Prepare itemized work plan, check for Conflict of Interest	Within 30 days of receipt of Performance Work Statement
3	First Scoping Meeting	Within 30 days of EPA's receipt of Contractor Workplan
4	Performance of Task 1	Four months after workplan approval
5	Performance of Task 2	Four months after workplan approval
6	On-going communication between EPA and Contractor	
7	Project Complete	September 25, 2019

II- General Work Assignment Requirements

Deliverable Formatting and Terminology

Throughout this work assignment, the contractor shall provide draft and final reports to EPA in electronic format, with hard copy format also provided when directed by the WACOR. The EPA WACOR and contractor will use the terminology defined in Attachment A to improve the deliverable review process. The contractor shall discuss the computer file formats to be used for word processing, spreadsheet, database and graphics with the EPA WACOR prior to file preparation.

In addition, the EPA WACOR will identify for the contractor which documents will be posted on EPA's Effluent Guidelines webpage (http://water.epa.gov/scitech/wastetech/guide/steam_index.cfm). These documents posted to the Effluent Guidelines webpage must be Section 508 compliant.¹

Travel

Non-local travel by the contractor employees or subcontractors will be required to support the scope of this work assignment. The contractor shall provide specific travel details and costs for any travel directly chargeable under this WA and must submit it for travel approval by the EPA WACOR and the EPA Project Officer (PO) before each trip occurs (as specified by the contract per clause H.32).

Event Expenses Not to Exceed \$20,000

No single event under this Work Assignment is anticipated to exceed \$20,000. The Contractor shall immediately notify the EPA Contracting Officer, PO and WACOR of any anticipated event

¹ See <http://www.epa.gov/epahome/accessibility.htm>.

involving support for a meeting, conference, workshop, symposium, retreat, seminar or training that may potentially incur \$20,000 or more in cost during performance.

Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the Contracting Officer.

Confidential Business Information

During the course of the work assignment, the contractor will be accessing and evaluating CBI. The contractor shall, at all times, adhere to Confidential Business Information (CBI) procedures when handling industry information. The contractor shall manage all reports, documents, and other materials and all draft documents developed under this work assignment in accordance with the procedures set forth in the "Office of Science & Technology Confidential Business Information (OST-CBI) Application Security Plan" (August 1, 2011) or its successor approved plans.

Identification as Contracting Staff

To avoid the perception that contractor personnel are EPA employees, contractor personnel shall be clearly identified as independent contractors of EPA when participating in events with outside parties and visiting field sites. When speaking with the public the contractor should refer all interpretations of policy to the EPA WACOR.

Limitation of Contractor Activities

The contractor shall submit drafts of all deliverables to the EPA WACOR for review prior to submission of the final product. The contractor shall incorporate all EPA WACOR comments into all final deliverables, unless otherwise agreed upon by the EPA WACOR. The contractor will adhere to all applicable EPA management control procedures as implemented by the EPA Contracting Officer (CO), PO, and WACOR.

Deliverable Due Dates

For developing this WA workplan, the contractor shall assume the deliverable due dates in the tables for each task presented further. The WACOR needs to provide to the contractor technical direction where deliverable dates are not specified in tables. Major technical deliverables shall be subject to internal contractor peer review by an expert(s) not directly involved in the mainstream Work Assignment tasks. Deliverables will be prepared with proper adherence to EPA style and format requirements.